$costvar,\ c$
$termvar,\ x,\ y,\ z,\ f$
$baseAttackVar,\ b$
$index,\ i,\ j,\ k$

$$
\begin{array}{lll}
A,\ B,\ C,\ E & ::= & \\
 & | & b \\
 & | & A \odot B \\
 & | & A \sqcup B \\
 & | & A \rhd B \\
 & | & A \multimap B \\
 & | & A \circ\!\!-\!\!\circ B \\
 & | & (A)
\end{array}
$$

$$
\begin{array}{lll}
T & ::= & \\
 & | & b \\
 & | & T_1 \odot T_2 \\
 & | & T_1 \rhd T_2 \\
 & | & T_1 \sqcup T_2 \\
 & | & (T)
\end{array}
$$

$$
\begin{array}{lll}
\Gamma,\ \Delta,\ \Theta,\ \Psi & ::= & \\
 & | & \cdot \\
 & | & A \\
 & | & \Gamma, \Gamma'
\end{array}
$$

$\boxed{\Gamma; \Delta \vdash T}$

$$\frac{}{\cdot; b \vdash b}\ \text{T\_VAR}$$

$$\frac{}{b; \cdot \vdash b}\ \text{T\_VARC}$$

$$\frac{\Gamma_1; \Delta_1 \vdash T_1 \quad \Gamma_2; \Delta_2 \vdash T_2}{\Gamma_1, \Gamma_2; \Delta_1, \Delta_2 \vdash T_1 \odot T_2}\ \text{T\_PARA}$$

$$\frac{\Gamma_1; \Delta_1 \vdash T_1 \quad \Gamma_2; \Delta_2 \vdash T_2}{\Gamma_1, \Gamma_2; \Delta_1, \Delta_2 \vdash T_1 \rhd T_2}\ \text{T\_SEQ}$$

$$\frac{\Gamma_1; \Delta_1 \vdash T_1 \quad \Gamma_2; \Delta_2 \vdash T_2}{\Gamma_1, \Gamma_2; \Delta_1, \Delta_2 \vdash T_1 \sqcup T_2}\ \text{T\_CHOICE}$$

$\boxed{\Theta; \Psi \vdash E}$

$$\frac{}{\cdot; E \vdash E}\ \text{E\_VAR}$$

$$\frac{}{E; \cdot \vdash E}\ \text{E\_VARC}$$

$$\frac{\Theta_1; \Psi_1 \vdash E_1 \quad \Theta_2; \Psi_2 \vdash E_2}{\Theta_1, \Theta_2; \Psi_1, \Psi_2 \vdash E_1 \odot E_2}\ \text{E\_PARAI}$$

$$\frac{\Theta_1; \Psi_2 \vdash E_1 \odot E_2 \quad \Theta_2; \Psi_1, E_1, E_2, \Psi_3 \vdash E_3}{\Theta_1, \Theta_2; \Psi_1, \Psi_2, \Psi_3 \vdash E_3}\ \text{E\_PARAE}$$

$$\frac{\Theta_1; \Psi_1 \vdash E_1 \quad \Theta_2; \Psi_2 \vdash E_2}{\Theta_1, \Theta_2; \Psi_1, \Psi_2 \vdash E_1 \rhd E_2}\ \text{E\_SEQI}$$

$$\frac{\Theta_2; \Psi_2 \vdash E_1 \rhd E_2 \quad \Theta_1, E_1, E_2, \Theta_3; \Psi_2 \vdash E_3}{\Theta_1, \Theta_2, \Theta_3; \Psi_1, \Psi_2 \vdash E_3}\ \text{E\_SEQE}$$

$$\frac{\Theta; \Psi_1, E_1, E_2, \Psi_2 \vdash E}{\Theta; \Psi_1, E_2, E_1, \Psi_2 \vdash E}\ \text{E\_EX}$$

$$\frac{\Theta_1; \Psi_1 \vdash E_1 \quad \Theta_2; \Psi_2 \vdash E_2}{\Theta_1, \Theta_2; \Psi_1, \Psi_2 \vdash E_1 \sqcup E_2}\ \text{E\_CHOICE}$$

$$\frac{\Theta; \Psi, E_1 \vdash E_2}{\Theta; \Psi \vdash E_1 \multimap E_2}\ \text{E\_IMPI}$$

$$\frac{\Theta_1; \Psi_1 \vdash E_1 \multimap E_2 \quad \Theta_2; \Psi_2 \vdash E_1}{\Theta_1, \Theta_2; \Psi_1, \Psi_2 \vdash E_2}\ \text{E\_IMPE}$$

$$\frac{\Theta; \Psi \vdash T}{\Theta; \Psi \vdash (T \sqcup T) \circ\!\!-\!\!\circ T}\ \text{E\_CHOICECONT}$$

$$\frac{\Theta; \Psi \vdash T_1 \sqcup T_2}{\Theta; \Psi \vdash (T_1 \sqcup T_2) \circ\!\!-\!\!\circ (T_2 \sqcup T_1)}\ \text{E\_CHOICESYM}$$

$$\frac{\Theta; \Psi \vdash (T_1 \sqcup T_2) \sqcup T_3}{\Theta; \Psi \vdash ((T_1 \sqcup T_2) \sqcup T_3) \circ\!\!-\!\!\circ (T_1 \sqcup (T_2 \sqcup T_3))}\ \text{E\_CHOICEASSOC}$$

$$\frac{\Theta; \Psi \vdash T_1 \odot (T_2 \rhd T_3)}{\Theta; \Psi \vdash (T_1 \odot (T_2 \sqcup T_3)) \circ\!\!-\!\!\circ ((T_1 \odot T_2) \sqcup (T_1 \odot T_3))}\ \text{E\_DISTPARA}$$

$$\frac{\Theta; \Psi \vdash T_1 \rhd (T_2 \sqcup T_3)}{\Theta; \Psi \vdash (T_1 \rhd (T_2 \sqcup T_3)) \circ\!\!-\!\!\circ ((T_1 \rhd T_2) \sqcup (T_1 \rhd T_3))}\ \text{E\_DISTSEQ}$$

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Definition rules:        20 good    0 bad
Definition rule clauses: 36 good    0 bad
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